

Claims

- [c1] 1. A chemical mechanical polishing (CMP) equipment, comprising:
a wafer holder for holding a provided wafer;
at least one strip polishing platen, wherein one end of the strip polishing platen is fixed and the strip polishing platen can be rotated about a rotation axis at the fixed end with a rotating angle less than 360 degrees;
a polishing pad arranged on the polishing platen;
a robotic arm coupled to the strip polishing platen, wherein the robotic arm controls a rotation of the strip polishing platen and ensures the polishing pad on the strip polishing platen touching the provided wafer during polishing; and
a slurry feeding system incorporated in the strip polishing platen to provide a polishing slurry between the polishing pad and the wafer for polishing,
wherein the strip polishing platen is located above the wafer holder during polishing and the polishing pad on the strip polishing platen faces the wafer holder, while the wafer holder rotates the wafer independent of the rotation of the strip polishing platen, and wherein the strip polishing platen is seated in a resting position beside the wafer holder during resting.
- [c2] 2. The CMP equipment of claim 1, wherein the strip polishing platen is strip-shaped.
- [c3] 3. The CMP equipment of claim 1, wherein the strip polishing platen is baguette-shaped.
- [c4] 4. The CMP equipment of claim 1, wherein the robotic arm further controls an applied pressure of the polishing pad on the wafer.
- [c5] 5. The CMP equipment of claim 1, wherein the strip polishing platen rotates with the rotating angle from 0 to 90 degrees.
- [c6] 6. The CMP equipment of claim 1, wherein the polishing pad is arranged on the polishing platen at an end opposite to the fixed end of the strip polishing platen.
- [c7] 7. The CMP equipment of claim 1, wherein a carrier film is further included between the wafer and the wafer holder for elasticity.

applied pressure of the polishing pad on the wafer.

- [c15] 15. The CMP equipment of claim 11, wherein each strip polishing platen rotates with the rotating angle from 0 to 90 degrees.
- [c16] 16. The CMP equipment of claim 11, wherein the polishing pad is arranged on the polishing platen at an end opposite to the fixed end of the strip polishing platen.
- [c17] 17. The CMP equipment of claim 11, wherein a carrier film is further included between the wafer and each wafer holder for elasticity.
- [c18] 18. The CMP equipment of claim 11, wherein a conditioner is further included and arranged under the polishing platen and at the resting position of the polishing platen.
- [c19] 19. The CMP equipment of claim 11, wherein the polishing pad is a flat pad arranged on the strip polishing platen.
- [c20] 20. The CMP equipment of claim 11, wherein the polishing pad is a cylindrical polishing roller mounted on the strip polishing platen.